

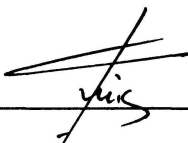
# **DETERMINATION OF MERCURY IN CANNED FISH**

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**Final Year Project Report Submitted in  
Partial Fulfillment of the Requirements for the  
Degree of Bachelor of Science (Hons.) Applied Chemistry  
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This Final Year Project entitled “**Determination of Mercury in Canned Fish**” was submitted by Nurr Maria Ulfa Bt Seruji, in partial requirements for the degree of Bachelor of Science (Hons.) Applied Chemistry, in the Faculty of Applied Sciences and was approved by




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*In the name of Allah, the Most Gracious and the Most Merciful*

Alhamdulillah, with the blessing and guidance from The Almighty, I manage to complete this final year project entitled “Determination of Mercury in Canned Fishes”.

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Nurr Maria Ulfa Binti Seruji

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## **ABSTRACT**

### **DETERMINATION OF MERCURY IN CANNED FISHES**

Mercury is a harmful heavy metal that bioaccumulates in human body and cause disturbance in human systems. The process biomagnifications that occur in the food chain brings mercury closer to human body since human are at the top levels of the aquatic food web fish-eating species besides seabirds, seals and otters. Exposure to mercury can be particularly hazardous especially for pregnant women and small children. The objective of this project is to determine whether the amount of mercury content in the canned fish is safe for the consumption by human. In this study, mercury was determined using Inductively Coupled Plasma – Optic Emission Spectrometer. The samples were prepared using the wet digestion method and mercury standard was prepared in three concentrations of 0.5 mg/L to 1.5 mg/L. The mercury detected in the canned fish was compared to the FDA mercury limit of 0.17 mg/L. Mercury content from the analysis was from 0.006 to 0.364 mg/L. By referring to the highest amount of mercury determined, it can be said that the canned fishes from the A brand is not safe for consumption. Therefore, the A brand canned fish is not safe for the consumption of the pregnant women and children especially.